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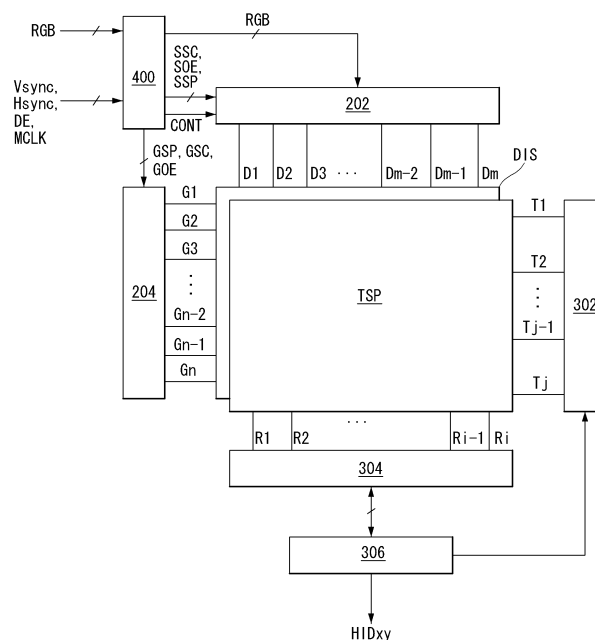
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(54) **Touch sensor integrated type display and method for driving the same**

(57) A touch sensor integrated type display includes a display panel including a touch screen having touch sensors, a data driving circuit for driving data lines of the display panel, and a timing controller for generating a control signal for controlling a potential of an output terminal of the data driving circuit in vertical blank periods

between adjacent vertical periods. The control signal selectively floats source output channels of the data driving circuit or selectively sets a potential of the source output channels to a predetermined voltage in the vertical blank periods.

FIG. 3





EUROPEAN SEARCH REPORT

Application Number
EP 12 19 6452

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
A	US 2010/013791 A1 (HAGA HIROSHI [JP] ET AL) 21 January 2010 (2010-01-21) * paragraphs [0079] - [0105], [0117]; figures 2,3,5 *	1-15	INV. G06F3/041 G06F3/044
A	US 2008/309633 A1 (HOTELLING STEVE PORTER [US] ET AL) 18 December 2008 (2008-12-18) * paragraphs [0021], [0049]; figures 6b,12 *	1-15	
			TECHNICAL FIELDS SEARCHED (IPC)
			G06F G02F
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 15 September 2014	Examiner Dixon-Hundertpfund
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document</p>			

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ON EUROPEAN PATENT APPLICATION NO.

EP 12 19 6452

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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2010013791 A1	21-01-2010	JP 5372630 B2	18-12-2013
		JP 2011014109 A	20-01-2011
		US 2010013791 A1	21-01-2010
		US 2013285986 A1	31-10-2013
		US 2014125616 A1	08-05-2014

US 2008309633 A1	18-12-2008	DE 102008028224 A1	18-12-2008
		GB 2453190 A	01-04-2009
		HK 1131229 A1	01-02-2013
		NL 2001672 A1	16-12-2008
		NL 2001672 C2	29-09-2009
		US 2008309633 A1	18-12-2008

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